

RECEIVED

DEC 02 2008

Department of Environmental Quality
State Air Program

Kevin Shilling

Re: Clemet's Concrete Permit to construct Application

Dear Mr. Shilling

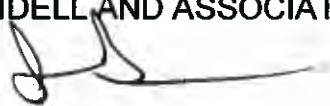
Please Find attached a coy of the Clements concrete permit to construct application to a portable concrete batching plant outside of Notus Idaho.

Clements Concrete requests that Spidell and Associates be informed if this application will need an air quality model or if the application will be processed as outlined using the new streamlined procedurals.

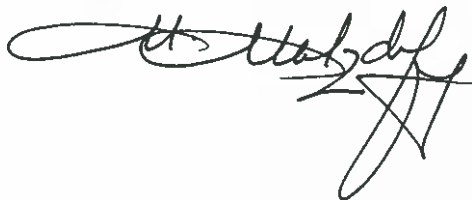
You can contact spidell and Associates at 2403 Spaulding Boise Idaho 83705 or at (208) 336-4862.

Sincerely

Jesse Sears
SPIDELL AND ASSOCIATES



CC: Mike Matzdorf
Vice President
Clements Concrete Company



Portable Cement Plant Permit to Construct Application

Clements Concrete Company, INC.

**1979 Ross Rustler 160
S/N Ru-198**

**Prepared For : Mike Matzdorf
Vice President
Clements Concrete Company, INC.
10988 Joplin Road
Boise, Idaho 83714
Phone: (208) 939-2000
Fax: (208) 939-7056**

**Prepared By: Spidell and Associates
2403 Spalding St.
Boise ID 83705**

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Introduction:

This Application is being submitted to obtain a Permit to construct a potential concrete batching plant near Notus Idaho.

The Application is arranged as outlined on the Table of Contents. A description of the facility and an emission estimate are contained in the narrative sections. A location map, plan map, process diagram, and all IDEQ forms are included in the Appendixes.

The purposed plant is a portal concrete batching plant manufactured in 1979 by Ross and is a module Rustler 160 Cu Yd owned by Clements Concrete Company, INC.

The applicant has signed all the required IDEQ forms and the Certification found in the Appendixes.

Purpose:

The permit Application is being submitted by Clements Concrete Company, INC to satisfy the requirements of IDAPA 58.01.01.200 for the construction of a concrete batching plant.

Facility Description:

The portable concrete batching plant will be located E of Notus Road 1/2 mile on Dixie River Road in Section 2, T4N, R4E. The Plortable plant is a 1979 Ross Rustler 160 owned by Clements Concrete Company, INC. A location map and a scaled plan map are included as figures 1 and 2.

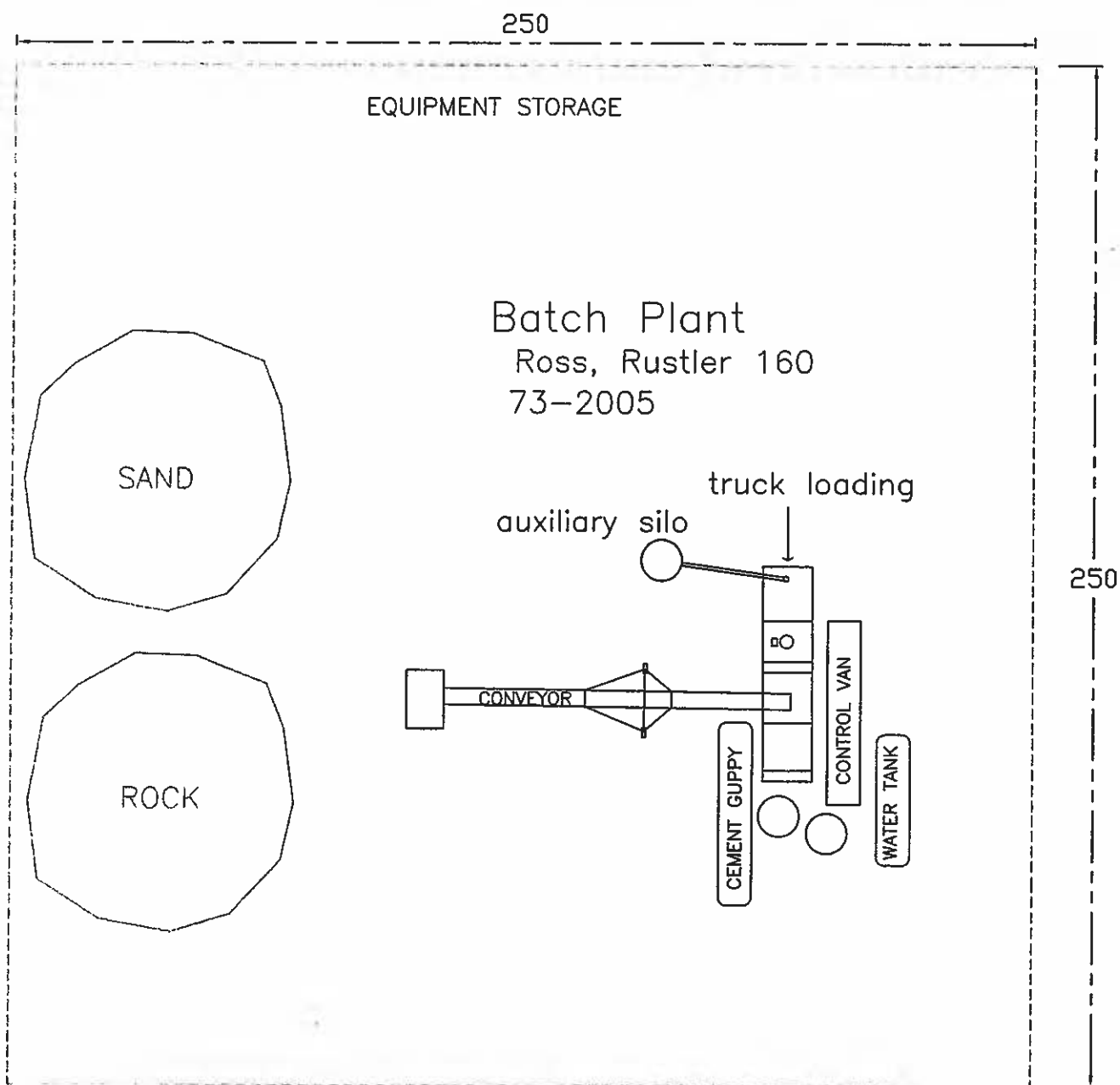
Equipment Listing:

The facility is portable concrete batching plant manufactured by Ross. It's make is a Rustler 160 and was made in 1979. The major components of the plant are:

- 3 aggregate bins with bin cover
- 1 auxiliary silo with auger feed
- 1 radial stacker feed belt with feed hopper
- 1 control van with Grace admixture system, NATCO 290 boiler, misc. water pumps and a 700 gallon saddle fuel tank (boiler).
- 1 12,000 gallon skid mounted, insulated water tank
- 1 Fruehauf 4100cf guppy with gasoline powered pneumatic blower

A diagram of the facility is included as figure 2, and a photo of the area is included in figure 1.

Emissions will be controlled by bag houses on auxiliary silo, cement guppy, and weigh batcher.



NOTES ROAD

ODIE RIVER ROAD

ACCESS ROAD

50-FOOT UNDISTURBED BUFFER

BACKFILL AREA TO CONSTRUCT RESIDENTIAL LOTS AND UNDULATING LAKE SHORELINE

CRUSHER-CONCRETE PLANT FACILITY ACREAGE 20.52 ACRES

EXISTING DITCH TO BE RELOCATED TO PROPERTY PERIMETER

DITCH RELOCATION LOCATIONS, SOUTH PERIMETER, THEN NORTH ALONG WEST PROPERTY PERIMETER, PRIOR TO MINING

GRAVEL STOCKPILE

CONCRETE PLANT

FACILITY PROCESS WATER POND - ZERO DISCHARGE

FACILITY PROCESS WATER POND - ZERO DISCHARGE

PARKING

GRAVEL STOCKPILE

GRAVEL CONVEYOR

GRAVEL CONVEYOR

PHASE 3

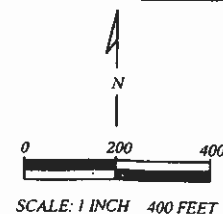
PHASE 3

ODIE RIVER ROAD

50-FOOT VEGETATED BUFFER

BACKFILL AREA TO CONSTRUCT RESIDENTIAL LOTS AND UNDULATING LAKE SHORELINE

LEGEND



BROWN AND CALDWELL
Boise, Idaho

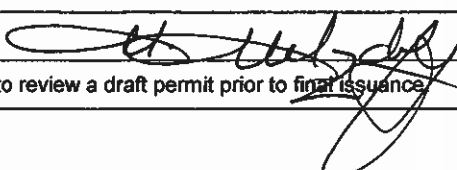


DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

General Information **Form GI**
Revision 6
09/09/08

Please see instructions on page 2 before filling out the form.

All information is required. If information is missing, the application will not be processed.

IDENTIFICATION	
1. Company Name	Clements Concrete Company INC
2. Facility Name (if different than #1)	Notus
3. Facility ID No.	73-2005
4. Brief Project Description:	The construction of a 1979 Ross Rustler 160 portable cement plant near Notus
FACILITY INFORMATION	
5. Owned/operated by: (√ if applicable)	<input type="checkbox"/> Federal government <input type="checkbox"/> County government <input type="checkbox"/> State government <input type="checkbox"/> City government
6. Primary Facility Permit Contact Person/Title	Mike Matzdorff
7. Telephone Number and Email Address	(208) 939-2000 mmatzdorff@clydeinc.com
8. Alternate Facility Contact Person/Title	
9. Telephone Number and Email Address	
10. Address to which permit should be sent	10988 Joplin Road
11. City/State/Zip	Boise ID 83714
12. Equipment Location Address (if different than #10)	E of Notus Road ½ mile on Dixie River Road in Section 2, T4N, R4E
13. City/State/Zip	Notus ID
14. Is the Equipment Portable?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
15. SIC Code(s) and NAICS Code	Primary SIC: RU-196 Secondary SIC (if any): NAICS:
16. Brief Business Description and Principal Product	Portable Cement Bating plant
17. Identify any adjacent or contiguous facility that this company owns and/or operates	Facility Id 001-00184 in Boise Id
PERMIT APPLICATION TYPE	
18. Specify Reason for Application	<input checked="" type="checkbox"/> Permit to Construct <input type="checkbox"/> Tier I Permit <input type="checkbox"/> Tier II Permit <input type="checkbox"/> Tier II/Permit to Construct
CERTIFICATION	
IN ACCORDANCE WITH IDAPA 58.01.01.123 (RULES FOR THE CONTROL OF AIR POLLUTION IN IDAHO), I CERTIFY BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION IN THE DOCUMENT ARE TRUE, ACCURATE, AND COMPLETE.	
19. Responsible Official's Name/Title	Mike Matzdorff Vice President
20. RESPONSIBLE OFFICIAL SIGNATURE	 Date: 12-2-08
21. <input checked="" type="checkbox"/> Check here to indicate you would like to review a draft permit prior to final issuance.	



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Cover Sheet for Air Permit Application – Permit to Construct **Form CSPTC**

Revision 5
 08/28/08

Please see instructions on page 2 before filling out the form.

COMPANY NAME, FACILITY NAME, AND FACILITY ID NUMBER			
1. Company Name	Clements Concrete Company INC		
2. Facility Name	Notus	3. Facility ID No.	73-2005
4. Brief Project Description - One sentence or less	The Construction of a 1979 Ross Rustler 160 Portable Cement Plant in Notus		
PERMIT APPLICATION TYPE			
5. <input checked="" type="checkbox"/> New Source <input type="checkbox"/> New Source at Existing Facility <input type="checkbox"/> PTC for a Tier I Source Processed Pursuant to IDAPA 58.01.01.209.05.c <input type="checkbox"/> Unpermitted Existing Source <input type="checkbox"/> Facility Emissions Cap <input type="checkbox"/> Modify Existing Source: Permit No.: _____ Date Issued: _____ <input type="checkbox"/> Required by Enforcement Action: Case No.: _____			
6. <input type="checkbox"/> Minor PTC <input type="checkbox"/> Major PTC			
FORMS INCLUDED			
Included	N/A	Forms	DEQ Verify
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form CSPTC – Cover Sheet	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form GI – Facility Information	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form EU0 – Emissions Units General	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form EU1– Industrial Engine Information Please specify number of EU1s attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form EU2– Nonmetallic Mineral Processing Plants Please specify number of EU2s attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form EU3– Spray Paint Booth Information Please specify number of EU3s attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form EU4– Cooling Tower Information Please specify number of EU3s attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form EU5 – Boiler Information Please specify number of EU4s attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form CBP– Concrete Batch Plant Please specify number of CBPs attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form HMAP – Hot Mix Asphalt Plant Please specify number of HMAPs attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	PERF – Portable Equipment Relocation Form	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form AO – Afterburner/Oxidizer	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form CA – Carbon Adsorber	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form CYS – Cyclone Separator	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form ESP – Electrostatic Precipitator	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form BCE– Baghouses Control Equipment	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form SCE– Scrubbers Control Equipment	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form VSCE – Venturi Scrubber Control Equipment	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form CAM – Compliance Assurance Monitoring	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Forms EI-CP1 – EI-CP4– Emissions Inventory– criteria pollutants (Excel workbook, all 4 worksheets)	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	PP – Plot Plan	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Forms MI1 – MI4 – Modeling (Excel workbook, all 4 worksheets)	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form FRA – Federal Regulation Applicability	<input type="checkbox"/>



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Air Permit Hotline-1-877-5PERMIT

Concrete Batch Plant Form CBP
Revision 6
08/28/08

Please see instructions on page 3 before filling out the form.

IDENTIFICATION		
1. Company Name: Clements Concrete Company, INC.	2. Facility Name: Notus	3. Facility ID No: 73-2005
4. Brief Project Description: The Construction of a 1979 Ross Rustler 160 Portable Cement Plant in Notus		

5. Proposed Initial Plant Location: E of Notus Road ½ mile on Dixie River Road in Section 2, T4N, R4E	
6. Nearest City: Notus	8. Estimated Startup Date: March 2009
7. County: Canyon	
9. Reason for Application: <input checked="" type="checkbox"/> Permit to construct a new source <input type="checkbox"/> Permit to operate an existing unpermitted source <input type="checkbox"/> Permit to modify/revise an existing permitted source (identify the permit below) Permit No.: Issue Date: Facility ID:	
10. Review draft request. <input type="checkbox"/> Check here to indicate you would like to review a draft permit prior to final issuance.	

Concrete Batch Plant

11. Manufacturer: Ross	12. Model: Rustler 160
13. Manufacture Date: 1979	
14. Maximum Hourly Throughput: 160 (cy/hour)	
15. Maximum Daily Throughput: 3840 (cy/day)	
16. Maximum Annual Throughput: 798,720 (cy/year)	
17. Requested Annual Throughput: 400,000 (cy/year)	

Cement Storage Silo Baghouse No. 1

18a. Manufacturer: Ross	19a. Model: Rustler 160
20a. Stack Height from Ground: 40 (ft)	21b. Exit Air Flow Rate: 4,000 (acfm)
22a. Stack Inside Diameter: 12 (ft)	23a. * PM ₁₀ Control Efficiency: 99.99 (%)
24a. * Manufacturer Grain Loading Guarantee: 0.01 sn/dsut	
* Attach manufacturer's PM ₁₀ control efficiency guarantee, if available.	

Cement Storage Silo Baghouse No. 2 guppies

18b. Manufacturer: Ross	19b. Model: Rustler 160
20b. Stack Height from Ground: (ft)	21b. Exit Air Flow Rate: 4,000 (acfm)
22b. Stack Inside Diameter: (ft)	23b. * PM ₁₀ Control Efficiency: 99.99 (%)
24b. * Manufacturer Grain Loading Guarantee: 0.0100	
* Attach manufacturer's PM ₁₀ control efficiency guarantee if available.	

Cement Supplement (such as flyash) Storage Silo Baghouse No. _____

18c. Manufacturer:		19c. Model:	
20c. Stack Height from Ground:	(ft)	21c. Exit Air Flow Rate:	(acfm)
22c. Stack Inside Diameter:	(ft)	23c. * PM ₁₀ Control Efficiency:	(%)
24c. * Manufacturer Grain Loading Guarantee:			
* Attach manufacturer's PM ₁₀ control efficiency if available.			

Cement Supplement (such as flyash) Storage Silo Baghouse No. _____

18d. Manufacturer:		19d. Model:	
20d. Stack Height from Ground:	(ft)	21d. Exit Air Flow Rate:	(acfm)
22d. Stack Inside Diameter:	(ft)	23d. * PM ₁₀ Control Efficiency:	(%)
24d. * Manufacturer Grain Loading Guarantee:			
* Attach manufacturer's PM ₁₀ control efficiency if available.			

Weigh Batcher Baghouse(s)

18e. Manufacturer:	Ross	19e. Model:	Rustler 160
20e. Stack Height from Ground:	40 (ft)	21e. Exit Air Flow Rate:	4000 (acfm)
22e. Stack Inside Diameter:	12 (ft)	23e. * PM ₁₀ Control Efficiency:	99.99 (%)
24e. * Manufacturer Grain Loading Guarantee:		0.01	
* Attach manufacturer's PM ₁₀ control efficiency if available.			

☐ \$1,000 PTC application fee is enclosed

☐ A Portable Equipment Relocation Form (PERF) is enclosed.

Portable Equipment Relocation Form. Complete the Portable Equipment Relocation Form (PERF). An electronic copy of the PERF can be obtained from the DEQ website at www.deq.idaho.gov/air/permits_forms/forms/ptc_relocation.doc for Word format). **Important note:** In addition to being submitted with this PTC application, a PERF must also be completed and filed at DEQ at least 10 days in advance of relocating any of the equipment covered in this application.

Certification of Truth, Accuracy, and Completeness (by Responsible Official, as defined in IDAPA 58.01.01.006)

I hereby certify that based on information and belief formed after reasonable inquiry, the statements and information contained in this and any attached and/or referenced document(s) are true, accurate, and complete in accordance with IDAPA 58.01.01.123-124.


Responsible Official Signature

VICE PRESIDENT
Responsible Official Title

12-02-08
Date

M.R. MATZKO
Print or Type Responsible Official Name

**AIR DISPERSION MODELING PROTOCOL : REQUEST TO USE DEQ GENERIC MODELING RESULTS TO
DEMONSTRATE PRECONSTRUCTION COMPLIANCE WITH IDAHO AIR QUALITY RULES.**

Proposed Project: **Portable Concrete Batch Plant**, 160 cy/HR 400000 cy/YR

Location: (if portable, identify initial location) E of Notus Road ½ mile on Dixie River Road in Section 2, T4N, R4E

- 1) An emissions inventory (EI) based on the plant's capacity and proposed maximum daily and annual operations will be included with the application, and will comply with the following:
 - a. Emissions will be calculated using AP-42 emission factors and good engineering judgment.
 - b. Fugitive emissions sources will be included in the EI, except for emissions resulting from vehicle traffic and wind erosion from storage piles.
 - c. The level of emissions control assumed for each source will be clearly specified.
 - d. Cr+6 will be presumed to comprise 20% of the total chromium emissions from cement silo filling, and 30% of the total chromium emissions from cement supplement (flyash) silo filling.

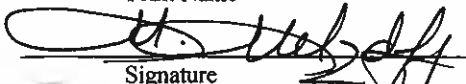
- 2) The proposed project will meet all of the criteria specified below, and _____ agrees to accept permit conditions requiring continuing compliance with the physical parameters and setback distance(s) described in Table 1. _____ is requesting that the DEQ generic model results be used to demonstrate preconstruction compliance with NAAQS and TAPs for this project. No additional modeling analysis will be submitted for this project.

**Table 1. CRITERIA FOR USING DEQ's CONCRETE BATCH PLANT GENERIC MODELING RESULTS FOR AIR
IMPACT ANALYSES**

Parameter	DEQ Generic Modeling Assumptions				Proposed Project
Concrete batch plant type and capacity	Truck mix (redi-mix or dry mix) or Central mix				Central mix
Operation in any PM ₁₀ nonattainment area	Not proposed.				No
Presence of an electric generator.	No generator. Line power is available.				Line Power is available
<u>No Collocation.</u> Minimum distance from nearest edge of any emissions source to any other source of emissions, including another concrete batch plant, hot mix asphalt plant, or rock crushing plant.	200 meters (656 feet)				200 meters
Number of cement and/or cement supplement storage silos 1	Not limited. The model layout assumes all silo emissions are from the same point, and that cement/supplement is not transferred between storage silos.				
Maximum daily concrete production (cy/day)	1,500	2,400	3,600	4,800	2400
<u>Minimum Setback Distance.</u> Minimum distance from nearest edge of any emissions source to a receptor. ^a	40 m (131 ft)	60 m (197 ft)	100 m (328 ft)	150 m (492 ft)	60 m
Maximum annual concrete production (cy/year)	300,000	400,000	500,000	500,000	400000
<u>Cement and supplement storage silo baghouse(s)</u> Minimum stack height (height above ground) Minimum PM/PM ₁₀ control	10 meters (32.8 ft) 99%				10 meters 99%
<u>Weigh hopper loading baghouse, or equivalent</u> Minimum stack height (height above ground) Minimum PM/PM ₁₀ control	10 meters (32.8 ft) 99%				10 meters 99%
<u>Truck-mix loadout or Central Mix loading.</u> Minimum PM/PM ₁₀ control.	95% Boot enclosure, shroud, water sprays, or baghouse/cartridge filter				95% Boot Enclosure
<u>Transfer Point Fugitives.</u> Minimum PM/PM ₁₀ control.	75% Water sprays, enclosures, shrouds, or aggregate/sand is damp on an as-received basis and used before significantly drying out.				Aggregate/ Sand is damp

Mike Matzdorf

Print Name


Signature

Clements Concrete

Company

U.P.

Title/Position

208 939 2000

Telephone/E-mail

12308

Date

CRITERIA POLLUTANT EMISSION INVENTORY for Truck Mix Portable Concrete Batch Plant

Facility Information			12/2/08 11:50
Company:	Clements Concrete Company, INC	Assumptions Implied or Stated in Application:	
Facility ID:	73-2005		
Permit No.:	P-200x.xxxx		
Source Type:	Portable Concrete Batch Plant		
Manufacturer/Model:	Ross Rustler 160		
		See control assumptions	
		Truck Mix (T) or Central Mix (C)?	<div>C</div>

INCREASE IN Production¹

Maximum Hourly Production Rate:	160	cy/hr	
Proposed Daily Production Rate:	2,400	cy/day	15.00
Proposed Maximum Annual Production Rate:	400,000	cy/year	
Cement Storage Silo Capacity:	4540	ft ³ of aerated cement	
Cement Storage Silo Large Compartment Capacity for cement only:	65%	of the silo capacity	
Cement Storage Silo small Compartment Capacity for cement or ash:	35%	of the silo capacity	

Per manufacturer
Hours of operation per day at max capacity

DEQ EI VERIFICATION WORKSHEET v. 032007

Tip: Purple text or numbers are meant to be changed.
Black text or numbers indicates it's hard-wired or calculated.
Review these before you change them.

Change in PM₁₀ Emissions due to this PTC

Emissions Point	PM ₁₀ Emission Factor ¹ (lb/cy)		Controlled Emission Rate, Max. lb/hr ²	Controlled Emission Rate, 24-hour average		Controlled Emission Rate, annual average		Control Assumptions:
	Controlled	Uncontrolled		lb/hr ²	lb/day ³	lb/hr ⁴	T/yr ⁴	
Aggregate delivery to ground storage		0.0031	0.12	0.078	1.86	0.035	0.155	75% Water Sprays at Operator's Discretion
Sand delivery to ground storage		0.0007	0.03	0.018	0.42	0.008	0.035	75% Water Sprays at Operator's Discretion
Aggregate transfer to conveyor		0.0031	0.12	0.078	1.86	0.035	0.155	75% Water Sprays at Operator's Discretion
Sand transfer to conveyor		0.0007	0.03	0.018	0.42	0.008	0.035	75% Water Sprays at Operator's Discretion
Aggregate transfer to elevated storage		0.0031	0.12	0.078	1.86	0.035	0.155	75% Water Sprays at Operator's Discretion
Sand transfer to elevated storage		0.0007	0.03	0.018	0.42	0.008	0.035	75% Water Sprays at Operator's Discretion
Cement delivery to Silo (controlled EF)	0.0001		1.34E-02	8.35E-03	2.00E-01	3.81E-03	1.67E-02	0.00% Baghouse is process equipment
Cement supplement delivery to Silo (controlled EF)	0.0002		2.86E-02	1.79E-02	4.29E-01	8.16E-03	3.58E-02	0.00% Baghouse is process equipment
Weigh hopper loading (sand & aggregate batcher loading)		0.0040	6.32E-04	3.95E-04	9.48E-03	1.80E-04	7.90E-04	99.9% Baghouse control
Truck mix loading, Table 11.12-2, "0.278 lb/ton of cement+flyash" x ((491 lb cement + 73 lb flyash)/cy concrete) / 2000 lb = 0.0784 lb/cy		0.0000	0.00	0.00	0.00	0.00	0.00	99.9% Baghouse control
Point Sources Total Emissions		4.20E-02	6.09E+00	3.81E+00	9.14E+01	1.74E+00	7.61E+00	
Process Fugitive Emissions		0.0114	0.46	0.29	6.85	0.13	0.57	
Facility Wide Total: Point Sources + Process Fugitives (Except for Road Dust and Windblown Dust)		0.0534	6.55	4.09	98.21	1.87	8.18	

POINT SOURCE EMISSIONS for FACILITY CLASSIFICATION⁵ Controlled EF

at 1,401,600 cy/yr

T/yr

Facility Classification Total PM⁶	8.40E-03	5.89E+00
Facility Classification Total PM₁₀^{6,7}	4.21E-03	2.95E+00

¹ The EFs were calculated using EFs in lb/ton of material handled from Table 11.12-2, typical composition per cubic yard of concrete (1865 lb aggregate, 1428 lbs sand, 491 lbs cement, 73 lbs cement supplement, and 20 gallons of water = 4024 lb/cy), and closely match Table 11.12-5 values (version 6/06) when rounded to the same number of figures. AP-42 lists the same EFs for uncontrolled and controlled emissions, so control estimates are based on the assumed control levels input on the right hand side of the table.

² Max. hourly rate includes reductions associated with control assumptions.

³ Hourly emissions rate (24-hr average) = Max. hourly emissions rate x (hrs per day) / 24.

Daily emissions rate = max emissions rate (1-hr average) x proposed hrs/day.

⁴ Annual average hourly emissions rate = EF (lb/cy) x proposed annual production rate (cy/yr) / (8760 hr/yr).

Annual emissions rate = EF (lb/cy) x proposed annual production rate (cy/yr) / (2000 lb/T)

⁵ Controlled EFs for PM = 0.0002 (cement silo) + 0.0003 (flyash silo) + 0.0079 (weigh batcher)
for PM₁₀ = 0.0001 (cement silo) + 0.0002 (flyash silo) + 0.0040 (weigh batcher)

⁶ Emissions for Facility Classification are based on baghouses as process equipment, 24-hr day, 8760 hr/yr =

3,840 cy/day, and

1,401,600 cy/yr

⁷ Emissions for Facility Classification do not include truck mix loading emissions; this is typically considered a fugitive emission source for concrete batch plants.

Lead emissions		Increase in Emissions from this PTC					Emissions for Facility Classification	
Emissions Point	Lead Emission Factor ¹ (lb/ton of material loaded)		Emission Rate, Max. lb/hr, 1-hr avg. ²	Emissions for Comparison with DEQ Modeling Threshold		Emission Rate, Quarterly ⁵ lb/hr qtrly avg ⁵		T/yr
	Controlled with fabric	Uncontrolled		lb/month ³	T/yr ⁴			
Cement delivery to silo ²	1.09E-08	4.28E-07	4.28E-07	1.95E-04	1.07E-03	2.68E-07	Point Source	1.88E-06
Cement supplement delivery to Silo ³	5.20E-07	3.04E-06	3.04E-06	1.39E-03	7.59E-03	1.90E-06	Point Source	1.33E-05
Truck Loadout (with 99.9% control) ⁷		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Fugitive	
Total			2.07E-05	9.44E-03	0.052		Point Sources	1.52E-05
DEQ Modeling Threshold				100	0.6			
Modeling Required?				No	No			

¹ The emissions factors are from AP-42, Table 11.12-8 (version 06/06)

² Max. hourly rate = EF x pound of cement/yr³ of concrete x max. hourly concrete production rate/(2000 lb/T)

³ lb/mo = EF x pound of material/yr³ of concrete x max. daily concrete production rate x (365/12)/(2000 lb/T)

⁴ T/yr = EF x pound of material/yr³ of concrete x max. annual concrete production rate/(2000 lb/T)

⁵ lb/hr, qtrly avg = lb/mo x 3 months per qtr / (8760/4) hrs per qtr

Toxic Air Pollutant (TAPs) EMISSIONS INVENTORY, Truck Mix Concrete Batch Plant

12/02/2008 11:50

Facility Information			Emissions estimates are based on EFs in AP-42, Table 11.12-8 (version 06/06) and the following composition of one yard of concrete:		
Company:	Clements Concrete Company, INC		Coarse aggregate	1885 pounds	Truck Mix Loadout Factor: 0 Central Mix Batching Factor: 1
Facility ID:	73-2005		Sand	1428 pounds	
Permit No.:	P-200x.xxxx		Cement	491 pounds	
Source Type:	Portable Concrete Batch Plant		Cement supplement	73 pounds	
Manufacturer:	Ross Rustlor 160		Water	20 gallons	
			Concrete	4024 pounds	

DEQ EI VERIFICATION WORKSHEET Version 032007
Tip: Purple text or numbers are meant to be changed.
Black text or numbers indicates it's hard-wired or calculated.
Review these before you change them.

Increase in Production

Maximum Hourly Production Rate:	160	cy/hr
Proposed Daily Production Rate:	2,400	cy/day
Proposed Maximum Annual Production Rate:	400,000	cy/year

Uncontrolled (Unlimited Production Rate)

3,840 cy/day	24 hrs/day, 7 day/wk, 52 wks/year
1,401,600 cy/year	

TAP Emission Factors from AP-42, Table 11.12-8 (Version 06/06)

Emissions Point	Arsenic EF (lb/ton of material loaded)		Beryllium EF (lb/ton of material loaded)		Cadmium EF (lb/ton of material loaded)		Chromium EF (lb/ton of material loaded)		Manganese EF (lb/ton of material loaded)		Nickel EF (lb/ton of material loaded)		Phosphorus EF (lb/ton of material loaded)		Selenium EF (lb/ton of material loaded)		Percent of total Cr that is Cr+6
	Controlled with Fabric filter	Uncontrolled	Controlled with Fabric filter	Uncontrolled	Controlled with Fabric filter	Uncontrolled	Controlled with Fabric filter	Uncontrolled	Controlled with Fabric filter	Uncontrolled	Controlled with Fabric filter	Uncontrolled	Controlled with Fabric filter	Uncontrolled	Controlled with Fabric filter	Uncontrolled	
Cement delivery to silo (with baghouse)	4.24E-09	2.56E-05	4.86E-10	2.31E-06	4.86E-10	2.31E-06	2.90E-08	1.42E-06	1.17E-07	5.83E-06	4.16E-08	2.03E-06	1.64E-06	1.18E-06	7.24E-08	1.95E-06	20%
Cement supplement delivery to Silo (with baghouse)	1.00E-06	2.56E-05	9.04E-08	2.31E-06	1.98E-08	5.06E-07	1.22E-06	3.12E-05	2.56E-07	6.55E-06	2.28E-06	5.83E-05	3.54E-06	9.06E-05	7.24E-08	1.95E-06	30%
Truck Loadout (no boot or shroud)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	21.29%
Central Mix Batching (NO boot or shroud)	2.32E-07	0.00E+00	0.00E+00	0.00E+00	1.18E-08	0.00E+00	1.42E-06	3.12E-05	6.12E-05	1.42E-06	3.28E-06	8.36E-05	2.02E-06	5.06E-05	0.00E+00	0.00E+00	21.29%

UNCONTROLLED TAP EMISSIONS

Note: Includes baghouses as process equipment.

3,840 cy/day, and

1,401,600 cy/yr

Emissions Point	Arsenic		Beryllium		Cadmium		Chromium		Manganese		Nickel		Phosphorus		Selenium		Chromium VI
	lb/hr annual avg.	T/yr ⁴	lb/hr annual avg.	T/yr	lb/hr annual avg.	T/yr	lb/hr 24-hr avg.	T/yr ⁵	lb/hr 24-hr avg.	T/yr	lb/hr annual avg.	T/yr	lb/hr 24-hr avg.	T/yr	lb/hr 24-hr avg.	T/yr	
Cement delivery to silo (with baghouse)	1.67E-07	7.29E-07	1.91E-08	8.36E-08	1.91E-08	8.36E-08	1.14E-06	4.34E-05	4.60E-06	2.01E-05	1.64E-06	7.19E-06	4.64E-04	2.03E-03	ND	ND	2.28E-07
Cement supplement delivery to Silo (with baghouse)	5.84E-06	2.56E-05	5.28E-07	2.31E-06	1.16E-07	5.06E-07	7.12E-06	3.12E-05	1.50E-06	6.55E-06	1.33E-05	5.83E-05	2.07E-05	9.06E-05	4.23E-07	1.85E-06	2.14E-06
Truck Loadout (NO baghouse)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sources Total	1.65E-06	7.22E-05	6.47E-07	2.40E-06	6.87E-07	2.92E-06	7.23E-06	3.55E-04	2.77E-03	1.21E-02	1.63E-04	7.14E-04	1.40E-03	6.11E-03	4.23E-07	1.85E-06	1.80E-05
IDAPA Screening EL (lb/hr)	1.50E-06		2.80E-05		3.70E-06		3.30E-02		3.33E-01		2.70E-05		7.00E-03		1.30E-02		5.60E-07
EXCEEDS EL?	Yes		No		No		No		No		Yes		No		No		Yes

1.94E-02 Tons per year

CONTROLLED TAP EMISSIONS

Note: Includes baghouses as process equipment.

2,400 cy/day, and

400,000 cy/year

Emissions Point	Arsenic		Beryllium		Cadmium		Chromium		Manganese		Nickel		Phosphorus		Selenium		Chromium VI
	lb/hr annual avg.	T/yr ⁴	lb/hr annual avg.	T/yr	lb/hr annual avg.	T/yr	lb/hr 24-hr avg.	T/yr ⁵	lb/hr 24-hr avg.	T/yr	lb/hr annual avg.	T/yr	lb/hr 24-hr avg.	T/yr	lb/hr 24-hr avg.	T/yr	
Cement delivery to silo (with baghouse) ¹	4.75E-08	2.08E-07	5.45E-09	2.39E-08	5.45E-09	2.39E-08	7.12E-07	1.42E-06	2.87E-06	5.74E-06	4.68E-07	2.05E-06	ND	ND	ND	ND	6.50E-08
Cement supplement delivery to Silo (with baghouse) ²	1.67E-06	7.30E-06	1.51E-07	6.60E-07	3.30E-08	1.45E-07	3.00E-05	8.91E-06	6.28E-06	1.87E-06	3.60E-06	1.66E-05	8.69E-05	2.58E-05	2.64E-07	5.29E-07	6.10E-07
Truck Loadout (with baghouse)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sources Total	4.70E-06	2.06E-05	1.58E-07	6.84E-07	1.90E-07	8.34E-07	7.07E-06	9.04E-05	1.73E-03	3.46E-03	4.68E-05	2.04E-04	6.57E-04	1.17E-03	2.64E-07	5.29E-07	4.57E-06
IDAPA Screening EL (lb/hr)	1.50E-06		2.80E-05		3.70E-06		3.30E-02		3.33E-01		2.70E-05		7.00E-03		1.30E-02		5.60E-07
Percent of EL	313.44%		0.56%		5.15%		0.21%		0.5210%		172.24%		9.38%		0.0020%		815.83%
EXCEEDS EL?	Yes		No		No		No		No		Yes		No		No		Yes

4.94E-03 Tons per year

¹ lb/hr, annual average = EF x pound of cement / Yd³ of concrete x annual concrete production rate / 2000lb/Ton / 8760 hr/yr; lb/hr, 24-hr = EF x pound of cement / Yd³ of concrete x daily concrete production rate / 2000lb/Ton / 24 hr/day

² lb/hr, annual average = EF x pound of cement supplement / Yd³ of concrete x annual concrete production rate / 2000lb/Ton / 8760 hr/yr; lb/hr, 24-hr average = EF x pound of cement supplement / Yd³ of concrete x daily concrete production rate / 2000lb/Ton

³ lb/hr, annual average = EF x pound of (cement + cement supplement) / Yd³ of concrete x annual concrete production rate / 2000lb/Ton / 8760 hr/yr; lb/hr, 24-hr average = EF x pound of (cement + cement supplement) / Yd³ of concrete x daily concrete production

⁴ T/yr = lb/hr, annual avg x 8760 hr/yr x (11/2000 lb)

⁵ T/yr = EF x pound of cement, or cement supplement, or cement + cement supplement x annual concrete production rate / 2000 lb/ton / 2000 lb/ton



DEQ AIR QUALITY PROGRAM
 1410 N. Hilton, Boise, ID 83706
 For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

AIR PERMIT APPLICATION

Revision 5
 09/08/08

For each box in the table below, CTRL+click on the blue underlined text for instructions and information.

IDENTIFICATION		
1. Company Name: Clements Concrete Company INC	2. Facility Name: Notus	3. Facility ID No.: 73-2005
4. Brief Project Description: of a 1979 Ross Rustler 160 Portable Cement Plant in Canyon Cty		
APPLICABILITY DETERMINATION		
5. Review <u>current federal regulations</u> and identify federal regulations that apply or appear to apply to the facility. You will list applicable regulations below in items 6-8.	<input checked="" type="checkbox"/> The facility is not subject to any federal regulations. If you checked this box, the form is now complete. <input type="checkbox"/> Federal regulation(s) applies. Continue with item 6.	
6. List <u>applicable subpart(s)</u> of the New Source Performance Standards (NSPS) (40 CFR part 60).	List of applicable subpart(s): <input type="checkbox"/> Not applicable.	
7. List applicable subpart(s) of the National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP), also called Maximum Achievable Control Technology (MACT), found in 40 CFR part 63.	List of applicable subpart(s): <input type="checkbox"/> Not applicable.	
8. List applicable subpart(s) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) found in 40 CFR part 61.	List of applicable subpart(s): <input type="checkbox"/> Not applicable.	
9. For each subpart identified above, conduct a <u>complete regulatory analysis</u> .	<input type="checkbox"/> Regulatory analysis complete. <input type="checkbox"/> Not applicable. Explain why:	
10. Will this facility be subject to <u>compliance assurance monitoring (CAM)</u> (40 CFR 64) as a result of this permitting action?	<input type="checkbox"/> NO, the facility is not subject to CAM at the time of this permitting action. Please explain why: <input type="checkbox"/> YES If yes, please fill out DEQ <u>Form CAM</u> . <input type="checkbox"/> Not applicable.	
11. List applicable part(s) and subpart(s) of <u>other federal regulations</u> that are not included in items 7 through 9, and conduct a <u>complete regulatory analysis</u> .	List of all applicable part(s) and subpart(s): <input type="checkbox"/> Not applicable.	
IF YOU ARE UNSURE HOW TO ANSWER ANY OF THESE QUESTIONS, CALL THE AIR PERMIT HOTLINE AT 1-877-5PERMIT		



IDAHO DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton
Boise, Idaho 83706-1253

RECEIPT

12/2/08

DATE

RECEIVED FROM

Clements Concrete Co.

SOURCE Cash <input type="checkbox"/> Check <input checked="" type="checkbox"/> Money Order <input type="checkbox"/> No. _____					
DESCRIPTION PTC Fac. ID 00100184 Boise ID				AMOUNT OF PAYMENT 1000.00	
RECEIVED-BY 				TOTAL RECEIVED 1000.00	
PID	OBS	CA	SUB-OBJ	WP	BE

No 82914